

Work Order ID 147417

147417

Page 1

Wednesday, June 08, 2016 3:16:17 PM

Item ID: D350-636-012 Accept *N900040100* Setup Start *NS1*
 Revision ID: Stop *NS2*
 Item Name: Skidtube RH, Std Wearplates, DART (Apical) Cylindrical/Aerazur Float Comp.
 Start Date: 5/27/2016 Start Qty: 1.00 *1* Cust Item ID:
 Required Date: 6/8/2016 Req'd Qty: 1.00 *1* Customer:
 Reference:

Approvals: Process Plan: MLJ Date: JUN 10 2016 Tooling: SPC (Y/N): Date: Run Start *NR1*
 QC: Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr								
D2750-042	G								
D3492	E								

100 Document Control 0.00
 100 DOCUMENT CONTROL
 DC Memo 0.00
 Doc.Control -USB or Paperwork
 record fwd angle: 89.7°
 Photocopy blue file and type labels per PPP D350-636-012 CHG 007

DAS
 28
 9-89
 AUG 02 2016
 AUG 02 2016

B147417RH

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

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Revision ID: Stop ***NS2***
Item Name: Skidtube RH, Std Wearplates, DART (Apical) Cylindrical/Aerazur Float Comp.
Start Date: 5/27/2016 Start Qty: 1.00 *1* Cust Item ID:
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Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

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110	Skidtubes	0.00							
110		0.16							
Skidtubes	Memo								
Skidtubes	1- Pick D2600-3 Bent								
	2- Deburr FWD and AFT ends, remove bending marks. Scribe batch# inside AFT end per dwg D2750								
	3- Drill pilot holes for blade fitting bolt holes using DT8983. Start with 3/16", then open to 0.500" using center drill then ream holes using 0.500" reamer. PIN first side. Repeat process on second side.								
	ENSURE PROPER POSITIONING FWD BEND MUST BE FACING UP WHEN DRILLING FIRST SIDE								
	Drill pilot holes as per Dwg D2750 sheet 4 (D2750-2 details). Drill using drill Jig DT8150 & DT8863A for second side only DT8863B for first side (detail K)								
	4- Locate DT8329 off of blade fitting bolt holes and drill pilot holes for blade fitting. Open to 0.500" using hole saw. VERIFY AND RECORD FWD BEND ANGLE.								
	6- Drill pilot holes for wearplates as per Dwg D2750 using DT8108 open to 0.297".								
	7- Open up holes of Detail J to 0.297" (total of 2 holes per side)								
	8- Weld D2744 Cap as per Dwg D2750 and QSI 004: Fill grooves in bend left from bending as per QSI 004								

16-7-8 M.G. [Signature]

16-7-11 [Signature]

BL160712

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

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Work Order update only ☐

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Revision ID:

Stop ***NS2***

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Start Date: 5/27/2016 Start Qty: 1.00 ***1***

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A/R Aluminum Rod batch: 1134826

9- Grind welds flush as per Dwg D2750

70E16-07-12

120 QC10- Inspect visual per QSI004- ground welds 0.00

120

QC Memo 0.00

Quality Control

D 16-07-14 DAS
9
9-89

130 QC5- Inspect part completeness to step on W/O 0.00

130

QC Memo 0.00

Quality Control

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Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause Environment Design Doc/Data Equip/Tooling Handling/Pre Material Internal Transport Tribal Knowledge LOA Substation Past Expiry Date Misidentified No Re-verification Operator Offset/Setup Supplier Training Use for Testing Poor Information Rushing Product Improvement Process Improvement Manufacturing Process Past Due		FAULT CATEGORY Pressure/Forced Bending Centre Not Concentric Cracks Crimp/Kink/Ripple/Wave Cuffs Crushing Heat Treat Wave/Twist in Tube Marks/Chatter Temperature/Cure Set-up BOM/Route Broken/Damage/Defect Inspection Incomplete/Unqualified Contamination Countersink Cut Too Short Instructions Incomplete/Unclear Drill Holes Power Loss/Surge Folio/Program Grain Weld Wrong Stock Pulled Out of Sequence Off-set Mislabeled Fit/Function Misaligned/off center Positioned Wrong Outside Dimensions Over/Under tolerance Part Incorrect Part Lost/Missing Part Moved Drawing Finish Misread Turning Sequence							
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**DAS
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QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval																																																										
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval																																																									
Root Cause		FAULT CATEGORY																																																															
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____			
Misidentified ☐	Past Due ☐																																																																

Work Order ID 147417

147417

Page 5

Wednesday, June 08, 2016 3:16:17 PM

Item ID: D350-636-012 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Skidtube RH, Std Wearplates, DART (Apical) Cylindrical/Aerazur Float Comp.
 Start Date: 5/27/2016 Start Qty: 1.00 ***1*** Cust Item ID:
 Required Date: 6/8/2016 Req'd Qty: 1.00 ***1*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160	Skidtubes	0.00							
160									
Skidtubes									
Skidtubes									
	Memo	0.17							
	1- Open up holes of Detail L using hole saw and ground handling to 0.625" (total of 8 holes per side) as per dwg D2750.								
	2- Open up holes of Detail K using hole saw to 0.750" (total of 4 holes per side) as per dwg D2750.								
	3- Open float holes using uni-bit to .500" (4 per Side)								
	4- Chamfer holes of Detail K, L, ground handling and float holes per dwg D2750 (welding instructions on sheet 9)								
	5- Deburr and blow out all chips from inside of tube								
	6- Prepare tube for welding, remove alodine as required.								
	7- Bond web D2739 in place as per QSI015 let cure for 12hrs. A/R Sikaflex-291 batch: <u>135204</u> exp. date: <u>16-07-18</u> <u>17-02-12</u>								
	ATTN: USE I-BEAM LOCATION AID (BLADE FITTING)								
	8- Weld spacers D3490-1, D3490-3 and D2743 as per dwg D2750 & QSI004 (welding instructions on sheet 9) A/R Aluminum Rod batch: <u>M1348216</u>								
	9- At section AP-AP drill out x-bolt spacer to 0.404"								
	10-Grind welds flush as per Dwg D2750								

DAS
19
9-00

16-7-18 JH

16-7-18 R.L

7BE16-07-19

16-7-20 JH

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
								Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	

Root Cause				FAULT CATEGORY							
Environment	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐	Power Loss/Surge	☐	Positioned Wrong	☐
Design	☐	Operator	☐	Bending	☐	Set-up	☐	Folio/Program	☐	Outside Dimensions	☐
Doc/Data	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐	Grain	☐	Over/Under tolerance	☐
Equip/Tooling	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐	Weld	☐	Part Incorrect	☐
Handling/Pre	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐	Wrong Stock Pulled	☐	Part Lost/Missing	☐
Material	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐	Out of Sequence	☐	Part Moved	☐
Internal Transport	☐	Poor Information	☐	Crushing	☐	Countersink	☐	Off-set	☐	Drawing	☐
Tribal Knowledge	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐	Mislabeled	☐	Finish	☐
LOA	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐	Fit/Function	☐	Misread	☐
Substation	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐	Misaligned/off center	☐	Turning Sequence	☐
Past Expiry Date	☐	Manufacturing Process	☐	OTHER : _____							
Misidentified	☐	Past Due	☐								

Work Order ID 147417

147417

Page 6

Wednesday, June 08, 2016 3:16:17 PM

Item ID: D350-636-012

Accept

N900040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Skidtube RH, Std Wearplates, DART (Apical) Cylindrical/Aerazur Float Comp.

Start Date: 5/27/2016 Start Qty: 1.00 *1*

Cust Item ID:

Required Date: 6/8/2016 Req'd Qty: 1.00 *1*

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
	11- Spot face ground handling holes section (total of 4 places per side) as per dwg D2750							DAS 19 9-89	
	12- Deburr holes, ensure tube is free of all scratches before sending to paint.								
170	QC10- Inspect visual per QSI004- ground welds	0.00							DAS 9 9-89
170									
QC	Memo	0.00							
Quality Control									
180	QC5- Inspect part completeness to step on W/O	0.00							DAS 9 9-89
180									
QC	Memo	0.00							
Quality Control	***VERIFY C'BOARD IS GOOD***								

16-7-21

① 16-07-26

① 16-07-26

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
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Date :		Step #:		QTY Effective :			MRB (QSI042) Approval																		
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval																	
Root Cause		FAULT CATEGORY																							
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐				Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐				Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐		Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐													
		OTHER : ☐																							

Work Order ID 147417

147417

Page 7

Wednesday, June 08, 2016 3:16:17 PM

Item ID: D350-636-012 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Skidtube RH, Std Wearplates, DART (Apical) Cylindrical/Aerazur Float Comp.
Start Date: 5/27/2016 Start Qty: 1.00 ***1*** Cust Item ID:
Required Date: 6/8/2016 Req'd Qty: 1.00 ***1*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp	DAS 34 9-89
190 *100* HandFinish Hand Finishing	Pressure Wash per QSI005 4.3 Memo Re-alodine tube as per QSI 005 section 4.1.2.1 do not acid etch.	0.00 0.07				①			2016/07/26 BEB	
200 *200* SprayPaint Spray Painting	1- PRIME AS PER DWG AND QSI 005 4.2 PRIMER PRC DESOTO 515X349 BATCH: <u>134937</u> 2- PAINT WHITE AS PER DWG AND QSI 005 4.2 PAINT BATCH: <u>135064</u>	0.00 0.07				1			16-7-26	DAS 41 9-89
210 *210* QC Quality Control	QC14- Inspect Spray Paint Memo Inspect for foreign object per QSI 024	0.00 0.00				IRH	d	2016/07/26		DAS 15 9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐							
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval				
Description Work Order Deviation				Disposition				Completed By			
Root Cause				FAULT CATEGORY							
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐		No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐		Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐		Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐		Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐	
OTHER : _____											

Work Order ID 147417***147417***

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Wednesday, June 08, 2016 3:16:17 PM

Item ID: D350-636-012

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Skidtube RH, Std Wearplates, DART (Apical) Cylindrical/Aerazur Float Comp.

Start Date: 5/27/2016 Start Qty: 1.00

1

Cust Item ID:

Required Date: 6/8/2016 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals:

Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start

NR1

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

NR2Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

230

0.00

230

HandFinish

Hand Finishing

HandFinishing

Memo

0.18

1-Install inserts as per dwg D2750

2-Inspect for Foreign Objects

3-Install blade fitting D3488-042, wearshoes and ground handling hardware as
per dwg D2750

SIKA FLEX 241

BATCH: 11135204EXP DATE: 17102

RTU 548 X1135047 16109

4-assemble o'ring to plug as per dwg D3492 and apply o'ring lube

A/R 55-o'ring lube batch: M133145

5-Coat all exposed fasteners with "LPS Procyon"

batch: M133696IRL of All 16107128

240

0.00

240

QC

Quality Control

QC5- Inspect part completeness to step on W/O

Memo

0.00

DAS
38
9-89

JUL 28 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
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Misidentified ☐	Past Due ☐																																																																

Work Order ID 147417***147417***

Page 9

Wednesday, June 08, 2016 3:16:17 PM

Item ID: D350-636-012

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Skidtube RH, Std Wearplates, DART (Apical) Cylindrical/Aerazur Float Comp.

Start Date: 5/27/2016 Start Qty: 1.00

1

Cust Item ID:

Required Date: 6/8/2016 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

250

Pick Kit

0.00

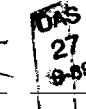
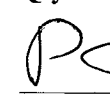
250

Packaging

Memo

0.00

Packaging



AUG 02 2016

260

QC4- 100% Inspect kits for completeness

0.00

260

QC

Memo

0.00

Quality Control



AUG 02 2016

270

Packaging

0.00

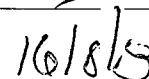
270

Packaging

Memo

0.00

Packaging

Package as per PPP D350-636-012
Location : FG072


DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td style="border: none;"></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
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APPROVED							Lead hand / Supervisor Approval Verification																		
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Work Order ID 147417

147417

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Wednesday, June 08, 2016 3:16:17 PM

Item ID: D350-636-012

Accept

N900040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Skidtube RH, Std Wearplates, DART (Apical) Cylindrical/Aerazur Float Comp.

Start Date: 5/27/2016 Start Qty: 1.00 *1*

Cust Item ID:

Required Date: 6/8/2016 Req'd Qty: 1.00 *1*

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop *NR2*

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID Tool # Plan Accept Reject Reject Insp.
Code Qty Qty Number Stamp

280

QC21- Final Inspection - Work Order Release

0.00

280

QC

Memo

0.02

Quality Control

SA
AUG 08 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

Picklist Print

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Page 1

Work Order ID: 147417

147417

Parent Item: D350-636-012

D350-636-012

Parent Item Name: Skidtube RH, Std Wearplates, DART (Apical) Cylindrical/Aerazur Float Comp.

Start Date: 5/27/2016

Required Date: 6/8/2016

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev:102.09.25Rearranged procedure stepsKJ
 IPP Rev:J 06-03-29 As per Rev D EC IPP REV:K
 AS PER REV F JLM 13-08-22 VERIFIED BY:DD
 IPP Rev:K 06-07.13 As per dsi9343 EC
 IPP Rev:L 07-07-28 Added SS Wearplates(Rev E) JLM Verified By:EC
 IPP Rev:M 08-04-22 update steps 4,13 DD verified by:EC
 IPP Rev:N 08-09-23 revF as per dwg DD verified by:ec IPP Rev:O
 10.06.22 revise seq110 DD verf:EC IPP Rev:P 10.10.01 as
 per IIN revH DD verf:EC IPP REV:Q 13.08.27 PER ECN13-
 594 DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

D2600-3-BENT-RH		Manufactured	No			110	Each	7.0000	1	1			
D2600-3-BENT-RH									**	16-7-8 HLG			
Extrusion Bent RH													

Location	Loc Qty	Loc Code
LG002	7	
142886	2	
146139	5	

D2744		Manufactured	No			110	Each	14.0000	1	1			
D2744									**	BE1607R			
Cap													

Location	Loc Qty	Loc Code
LG001	14	
137684	14	

D2739		Manufactured	No			160	Each	3.0000	1	1			
D2739									**	16-07-18			
350 I Beam													

Location	Loc Qty	Loc Code
LG002	3	
146128	3	
146130		

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																						
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐																						
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐																						
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Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval																		
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Root Cause		FAULT CATEGORY																							
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐																				
OTHER : _____																									

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Page 2

Work Order ID: 147417

147417

Parent Item: D350-636-012

D350-636-012

Parent Item Name: Skidtube RH, Std Wearplates, DART (Apical) Cylindrical/Aerazur Float Comp.

Start Date: 5/27/2016

Required Date: 6/8/2016

Start Qty: 1.00

Required Qty: 1.00

D2743

Manufactured No

160

Each

83.0000

8

8

D2743

Crossbolt Spacer

**

BE 16-07-19

Location

Loc Qty

Loc Code

LG001

83

141078

83

D3490-3

Manufactured No

160

Each

72.0000

4

4

D3490-3

Cross Bolt Spacer

**

BE 16-07-19

Location

Loc Qty

Loc Code

LG001

72

137807

2

140801

70

D3490-1

Manufactured No

160

Each

89.0000

4

4

D3490-1

Cross Bolt Spacer

**

BE 16-07-19

Location

Loc Qty

Loc Code

LG001

89

134019

4

144632

85

D3631-1

Manufactured No

230

Each

191.0000

8

8

D3631-1

Washer

**

BE 16-07-19

Location

Loc Qty

Loc Code

FP001

191

142562

91

147068

100

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Page 2

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td style="border: none;"></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
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Date :		Step #:		QTY Effective :			MRB (QSI042) Approval																		
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Root Cause		FAULT CATEGORY																							
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			OTHER : _____																	

Picklist Print

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Page 3

Work Order ID: 147417

147417

Parent Item: D350-636-012

D350-636-012

Parent Item Name: Skidtube RH, Std Wearplates, DART (Apical) Cylindrical/Aerazur Float Comp.

Start Date: 5/27/2016

Required Date: 6/8/2016

Start Qty: 1.00

Required Qty: 1.00

D3791-1 Manufactured No 230 Each 2.0000 1 1

D3791-1

Wearpad

lll 16/07/29

Location

Loc Qty

Loc Code

FP002

2

B145807

xl

139736

2

D3793-3 Manufactured No 230 Each 20.0000 1 1

D3793-3

Wearplate Aft

lll 16/07/28

Location

Loc Qty

Loc Code

FP002

20

142816

20

xl

MS21043-6 Purchased No 230 Each 79.0000 4 4

MS21043-6

NUT

lll 16/07/28

Location

Loc Qty

Loc Code

FG

20

103693

20

M135135

xl

FP001

9

m134365

5

m134557

4

ST302

50

m134817

50

D3794-1 Manufactured No 230 Each 13.0000 1 1

D3794-1

Gasket Fwd

lll 16/07/28

Location

Loc Qty

Loc Code

FP001

13

142770

13

xl

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Page 3

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
								Completed By	
								Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval					

Root Cause				FAULT CATEGORY							
Environment	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐	Power Loss/Surge	☐	Positioned Wrong	☐
Design	☐	Operator	☐	Bending	☐	Set-up	☐	Folio/Program	☐	Outside Dimensions	☐
Doc/Data	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐	Grain	☐	Over/Under tolerance	☐
Equip/Tooling	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐	Weld	☐	Part Incorrect	☐
Handling/Pre	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐	Wrong Stock Pulled	☐	Part Lost/Missing	☐
Material	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐	Out of Sequence	☐	Part Moved	☐
Internal Transport	☐	Poor Information	☐	Crushing	☐	Countersink	☐	Off-set	☐	Drawing	☐
Tribal Knowledge	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐	Mislabeled	☐	Finish	☐
LOA	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐	Fit/Function	☐	Misread	☐
Substation	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐	Misaligned/off center	☐	Turning Sequence	☐
Past Expiry Date	☐	Manufacturing Process	☐	OTHER : _____							
Misidentified	☐	Past Due	☐								

Picklist Print

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Page 4

Work Order ID: 147417

147417

Parent Item: D350-636-012

D350-636-012

Parent Item Name: Skidtube RH, Std Wearplates, DART (Apical) Cylindrical/Aerazur Float Comp.

Start Date: 5/27/2016

Required Date: 6/8/2016

Start Qty: 1.00

Required Qty: 1.00

NAS1611-010

Purchased

No

230

Each

133.0000

8

8

NAS1611-010

O-RING

**

ll 16/07/28

Location

Loc Qty

Loc Code

FP001

133

m130770

55

m131618

12

m134593

66

1435797

✓8

D2741

Manufactured

No

250

Each

26.0000

1

D2741

Replacement Blade

**

① XB145632 PC DAS 27 9-89

Location

Loc Qty

Loc Code

FG

10

131616

10

ST538

16

132981

15

141001

1

DAS 28 9-89

NAS1515H3L

Purchased

No

230

Each

187.0000

4

4

***NAS1515H3L ***

Washer

**

ll 16/07/28

Location

Loc Qty

Loc Code

FG

40

102472

40

FP001

43

m127831

43

ST260a

100

m134508

100

ST266

4

m130726

4

XL

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Page 4

DQA: _____ Date: _____

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QA Closed: _____ Date: _____

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Date :		Step #:		QTY Effective :			MRB (QSI042) Approval																		
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								Lead hand / Supervisor Approval Verification																	
								QC / QA Coordinator Approval																	
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Work Order ID: 147417

147417

Parent Item: D350-636-012

D350-636-012

Parent Item Name: Skidtube RH, Std Wearplates, DART (Apical) Cylindrical/Aerazur Float Comp.

Start Date: 5/27/2016

Required Date: 6/8/2016

Start Qty: 1.00

Required Qty: 1.00

NAS1611-013

Purchased

No

230

Each

170.0000

8

8

NAS1611-013

O-Ring

ll 16/07/28

Location

Loc Qty

Loc Code

FP001

170

m130758

19

m133812

51

m134676

100

11135247

x 8

AN3C6A

Purchased

No

230

Each

242.0000

4

4

AN3C6A

Bolt

ll 16/07/28

Location

Loc Qty

Loc Code

CA

31

m128704

31

FG

10

122416

10

FP001

98

m128769

4

m133363

5

m133990

13

m134762

76

ST338a

6

m133077

6

ST349

97

m132767

4

m133694

1

m134502

92

ycl

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

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OTHER : _____																																																															

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Page 6

Work Order ID: 147417

147417

Parent Item: D350-636-012

D350-636-012

Parent Item Name: Skidtube RH, Std Wearplates, DART (Apical) Cylindrical/Aerazur Float Comp.

Start Date: 5/27/2016

Required Date: 6/8/2016

Start Qty: 1.00

Required Qty: 1.00

NAS1149C0832R

Purchased

No

230

Each

49.0000

1

1

NAS1149C0832R

Washer

**

ll 16/07/28

Location

Loc Qty

Loc Code

FP001

49

m125807

49

xl

D3536-25

Manufactured

No

230

Each

9.0000

1

1

D3536-25

Gasket Center

**

ll 16/07/28

Location

Loc Qty

Loc Code

FG

6

87053

2

95328

4

FP001

3

141388

3

B146747

vl

D3794-3

Manufactured

No

230

Each

10.0000

1

1

D3794-3

Gasket Aft

**

ll 16/07/28

Location

Loc Qty

Loc Code

FP001

10

141134

10

B147325

xl

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td style="border: none;"></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
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								Completed By																	
								Lead hand / Supervisor Approval Verification																	
								QC / QA Coordinator Approval																	
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OTHER : _____																									

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Work Order ID: 147417

147417

Parent Item: D350-636-012

D350-636-012

Parent Item Name: Skidtube RH, Std Wearplates, DART (Apical) Cylindrical/Aerazur Float Comp.

Start Date: 5/27/2016

Required Date: 6/8/2016

Start Qty: 1.00

Required Qty: 1.00

AN3CSA

Purchased

No

230

Each

1,214.000

34

34

AN3C5A

Bolt

ll 16/07/28

Location

Loc Qty

Loc Code

FG

5

122800

5

FP001

756

X M134502 *X*

756

OVER002

400

M134676

400

ST350

53

M133234

53

x34

D3537-1

Manufactured

No

230

Each

54.0000

3

3

D3537-1

Wearpad

ll 16/07/28

Location

Loc Qty

Loc Code

FG

14

79833

4

88562

10

FP001

30

141922

7

142912

23

Return2016

9

107384

9

ST184

1

125911

1

B 146064

x3

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

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Root Cause				FAULT CATEGORY																					
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Work Order ID: 147417

147417

Parent Item: D350-636-012

D350-636-012

Parent Item Name: Skidtube RH, Std Wearplates, DART (Apical) Cylindrical/Aerazur Float Comp.

Start Date: 5/27/2016

Required Date: 6/8/2016

Start Qty: 1.00

Required Qty: 1.00

D3535-25

Manufactured No

230

Each

9.0000

1

1

D3535-25

Wearplate Center

**

JP 16/07/28

Location

Loc Qty

Loc Code

FG

3

B147414

139987

1

X1

95077

2

FP002

6

139732

6

D3492-3

Manufactured No

230

Each

137.0000

8

8

D3492-3

Plug

**

JP 16/07/28

Location

Loc Qty

Loc Code

FP001

137

133470

3

142869

134

X3

NAS1149C0332R

Purchased No

230

Each

4,461.000

38

38

NAS1149C0332R

WASHER

**

JP 16/07/28

Location

Loc Qty

Loc Code

FP001

1346

m132930

1004

m134073

128

m134574

214

GA

141

M135046

X39

m133284

141

ST266

2974

m134654

14

m134736

1960

m134962

1000

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Shop Packet Print

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DQA: _____ Date: _____



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Work Order ID: 147417

147417

Parent Item: D350-636-012

D350-636-012

Parent Item Name: Skidtube RH, Std Wearplates, DART (Apical) Cylindrical/Aerazur Float Comp.

Start Date: 5/27/2016

Required Date: 6/8/2016

Start Qty: 1.00

Required Qty: 1.00

D3488-042

Manufactured No

230

Each

3.0000

1

1

D3488-042

Blade Fitting RH

**

ll 16/07/20

Location

Loc Qty

Loc Code

FP001

3

138866

3

B144738

41

ALS4-1032-225

AELS8-1032-225

Purchased

No

230

Each

1,105.000

38

38

ALS4-1032-225

Rivnut

**

ll 16/07/20

Location

Loc Qty

Loc Code

FP001

1015

M133772

15

M134975

1000

st555

90

M128454

90

X39

D3492-1

Manufactured No

230

Each

4.0000

8

8

D3492-1

Plug

**

ll 16/07/20

Location

Loc Qty

Loc Code

FP001

4

142908

4

B147576

X9

D3793-1

Manufactured No

230

Each

20.0000

1

1

D3793-1

Wearplate Fwd

**

ll 16/07/20

Location

Loc Qty

Loc Code

FP002

20

142832

20

41

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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td style="border: none;"></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐																																															
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Picklist Print

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Work Order ID: 147417

147417

Parent Item: D350-636-012

D350-636-012

Parent Item Name: Skidtube RH, Std Wearplates, DART (Apical) Cylindrical/Aerazur Float Comp.

Start Date: 5/27/2016

Required Date: 6/8/2016

Start Qty: 1.00

Required Qty: 1.00

AN8C35A

Purchased

No

230

Each

91.0000

1

1

AN8C35A

Bolt

lll 16/07/25

Location

Loc Qty

Loc Code

FG	5	
121275	5	
FP001	11	
m132522	11	<i>y 1</i>
over005	75	
m133332	15	
m133336	15	
m134130	15	
m134131	15	
m134133	15	

MS21083C8

Purchased

No

230

Each

48.0000

1

1

MS21083C8

Nut

lll 16/07/25

Location

Loc Qty

Loc Code

FP001	3	
m133990	3	
ST297	45	
m134055	5	
m134509	20	
m134676	20	<i>x 1</i>

D2745

Manufactured

No

230

Each

114.0000

8

8

D2745

Bushing

lll 16/07/25

Location

Loc Qty

Loc Code

FP001	114	
129584	7	
136214	2	
144633	105	<i>x 8</i>

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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

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Picklist Print

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Work Order ID: 147417

147417

Parent Item: D350-636-012

D350-636-012

Parent Item Name: Skidtube RH, Std Wearplates, DART (Apical) Cylindrical/Aerazur Float Comp.

Start Date: 5/27/2016

Required Date: 6/8/2016

Start Qty: 1.00

Required Qty: 1.00

AN6C44A

Purchased

No

230

Each

397.0000

4

4

AN6C44A

Bolt

all 16/07/28

Location

Loc Qty

Loc Code

FP001

109

131649

50

m130863

9

m132522

50

x4

over009

246

m132556

246

ST333

42

m131946

42

D3532-1

Manufactured

No

250

Each

53.0000

2

2

D3532-1

Spacer

PC **DAS 27 9-89**

Location

Loc Qty

Loc Code

ST041

53

144630

53

2

MS21083C8

Purchased

No

250

Each

48.0000

2

2

MS21083C8

Nut

PC **DAS 27 9-89**

Location

Loc Qty

Loc Code

FP001

3

m133990

3

ST297

45

m134055

5

m134509

20

2

m134676

20

DAS 28 9-89

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DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

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Picklist Print

Wednesday, June 08, 2016 3:16:22 PM

Work Order ID: 147417

147417

Parent Item: D350-636-012

D350-636-012

Parent Item Name: Skidtube RH, Std Wearplates, DART (Apical) Cylindrical/Aerazur Float Comp.

Start Date: 5/27/2016

Required Date: 6/8/2016

Start Qty: 1.00

Required Qty: 1.00

NAS1149D0863J

Purchased

No

250

Each

508.0000

2

2

NAS1149D0863.J

Washer

PC
DAS
27
9-89

Location

Loc Qty

Loc Code

FP001

47

125484

47

ST260a

100

125635

100

ST263

361

125268

361

D3493-1

Manufactured

No

250

Each

88.0000

2

2

D3493-1

Washer

PC
DAS
27
9-89

Location

Loc Qty

Loc Code

FG

10

97201

10

ST039

78

140678

78

DAS
28
9-89

AUG 02 2016

DQA: _____ Date: _____



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OTHER : ☐																																																																									

Picklist Print

Wednesday, June 08, 2016 3:16:22 PM

Work Order ID: 147417

147417

Parent Item: D350-636-012

D350-636-012

Parent Item Name: Skidtube RH, Std Wearplates, DART (Apical) Cylindrical/Aerazur Float Comp.

Start Date: 5/27/2016

Required Date: 6/8/2016

Start Qty: 1.00

Required Qty: 1.00

AN8C21A

Purchased

No

250

Each

102.0000

2

2

AN8C21A

Bolt

PC
DAS
27
9-89

DAS
28
9-89

Location

Loc Qty

Loc Code

FG

4

123966

2

m132169

2

over005

90

m134130

30

m134514

30

m134590

30

ST332

8

m132169

2

m132522

4

m133917

2

2

AUG 02 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td style="border: none;"></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
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Description Work Order Deviation				Disposition				Completed By																	
								Lead hand / Supervisor Approval Verification																	
								QC / QA Coordinator Approval																	
Root Cause		FAULT CATEGORY																							
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QTY -041	QTY -042	QTY -043	QTY -044	PART NUMBER	DESCRIPTION
X				D2750-041	350 SKIDTUBE ASSEMBLY, LH
	X			D2750-042	350 SKIDTUBE ASSEMBLY, RH
		X		D2750-043	350 SKIDTUBE ASSEMBLY, LH
			X	D2750-044	350 SKIDTUBE ASSEMBLY, RH
1	1	1	1	D2739	WEB
8	8	8	8	D2743	SPACER
1	1	1	1	D2744	CAP
8	8	8	8	D2745	BUSHING
1				D2750-1	SKIDTUBE WELDMENT, LH
	1			D2750-2	SKIDTUBE WELDMENT, RH
		1		D2750-3	SKIDTUBE WELDMENT, LH
			1	D2750-4	SKIDTUBE WELDMENT, RH
1		1		D3488-041	BLADE FITTING, LH
	1		1	D3488-042	BLADE FITTING, RH
4	4	4	4	D3490-1	SPACER
4	4			D3490-3	SPACER
		4	4	D3490-5	SPACER
8	8	8	8	D3492-041	PLUG ASSEMBLY
8	8			D3492-043	PLUG ASSEMBLY
		8	8	D3492-045	PLUG ASSEMBLY
1	1	1	1	D3535-25	WEARSHOE
1	1	1	1	D3536-25	GASKET
3	3	3	3	D3537-1	WEARPAD
8	8	8	8	D3631-1	WASHER
1	1	1	1	D3791-1	WEARPLATE
1	1	1	1	D3793-1	WEARSHOE
1	1	1	1	D3793-3	WEARSHOE
1	1	1	1	D3794-1	GASKET
1	1	1	1	D3794-3	GASKET
38	38	38	38	ALS4-1032-225	INSERT (OR ALS7-1032-225, AKS4-1032-225, AELS-1032-225)
34	34	34	34	AN3C5A	BOLT
4	4	4	4	AN3C6A	BOLT
4	4	4	4	AN6C44A	BOLT
1	1	1	1	AN8C35A	BOLT
38	38	38	38	AN960C10L	WASHER
1	1	1	1	AN960C816L	WASHER
4	4	4	4	MS21043-6	NUT
1	1	1	1	MS21083C8	NUT
4	4	4	4	NAS1515H3L	WASHER

GENERAL NOTES:

- MATERIAL: MAKE D2750-1/-2/-3/-4 FROM D2600-3 EXTRUSION (INITIAL LENGTH = 120.0).
- FINISH: ACID ETCH, ALODINE ASSEMBLY PER DART QSI 005 4.1 PRIOR TO INSTALLING D2739 WEB.
STANDARD: PRIME (REF. 4.2.1.3.3) AND PAINT WHITE PER DART QSI 005 4.2
OPTIONAL: POWDER COAT WHITE (REF. 4.3.5.1) PER DART QSI 005 4.3
BLACK ANTI-SKID PAINT AS INDICATED TO 1.0 ABOVE SKIDTUBE CENTER-LINE PER DART 005 4.4 (OPTIONAL).
- TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- UNITS: INCHES UNLESS OTHERWISE NOTED
- BREAK SHARP EDGES: N/A
- IDENTIFICATION: N/A
- WEIGHT: D2750-041/-042/-043/-044 = 26.5 LBS
- WELD PER DART QSI 004
- INSTALL ALS4-1032-225 INSERTS AFTER FINISH AS INDICATED. DRILL 'F' SIZE HOLES (Ø0.297) FOR WEARSHOE INSERTS
- FINAL CONFIGURATION SHOULD HAVE THE FOLLOWING MINIMUM MECHANICAL PROPERTIES:
MINIMUM YIELD TENSILE STRENGTH = 35 KSI
MINIMUM ULTIMATE TENSILE STRENGTH = 38 KSI
- COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY, CLEAN EXCESS OFF
FINISH WITH MEK DEGREASER.
- SPACER AND PLUG INSTALLED SAME AS SECTION AJ-AJ EXCEPT HORIZONTAL
- SPACER AND PLUG INSTALLED SAME AS SECTION AP-AP EXCEPT HORIZONTAL

SINGLE COPY

10

ING

ED COPY

NDM

NOTE

ORDER

147-417-105

16-06-10

RELEASED
2013-08-13

G	CORRECTED TOLERANCE ON Ø0.500 THRU HOLE: IS +0.010/-0.000, WAS +0.100/-0.000 (ZN B3-4, B2-5); ADD VIEW TO CONTROL FWD BEND ORIENTATION (ZN D-1/-4/-5/-6/-7); UPDATED FINISH OPTIONS; INSIDE OF TUBE NO LONGER SPRAYED WITH LPS-3. REASON: PAR13-276 AND NCR13-2757	MB	13.07.11
F	INCORPORATE DSI 9413; QTY (3) D3537-1 WAS QTY (5) (ZN C8-1); D3791-1/-3 REPLACES D3535-13/-35 (ZN C8-1); D3794-1/-3 REPLACES D3536-13/-35 (ZN B8-1); ADD D3791-1 (ZN C8-1); WEARSHOE HOLES UNDER FWD/AFT SADDLE REMOVED (8 PL). WEARSHOE HARDWARE QTY UPDATED (ZN B8-1); D3488-041/-042 HARDWARE UPDATED (ZN C1-8, 9, 10, 11); ADD NOTE 12 AND 13 (ZN A6-1); REASON: REF. NCR 06-043	PH	08.07.16
E	CHANGE TO STAINLESS STEEL WEARPLATES; ADD RUBBER GASKETS; CHANGE INSERTS; ADD D3631-1; REMOVE QTY (38) NAS1515H3L; REMOVE QTY (10) NAS1515H8L; REMOVE D2741; QTY (2) AN960C816; REMOVE QTY (2) MS21083C8	CB	07.05.17
D	ADD HOLES AND SPACERS FOR APICAL FLOATS; INCORPORATE DEO 9133/9157	PH	06.01.05
C	ADD D2750-3/D2750-4; INCORPORATE D2738 AND D2740	CP	98.11.18
B	CHANGE MS24694-S293 TO AN8-16A	CP	98.09.01
A	NEW ISSUE	DS	98.04.16
REV.	DESCRIPTION	BY	DATE
DESIGN	MM		
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	13.07.11		

DART AEROSPACE USA, INC.

KENT, WA

DRAWING NO.

D2750

REV. G

SHEET 1 OF 11

TITLE

350 SKIDTUBE ASSEMBLY

SCALE

NTS

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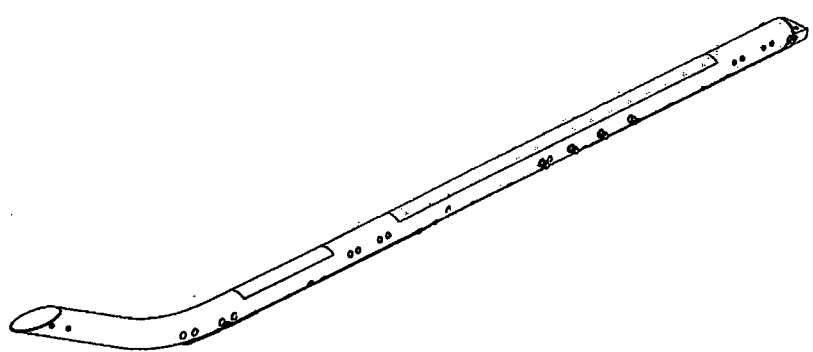
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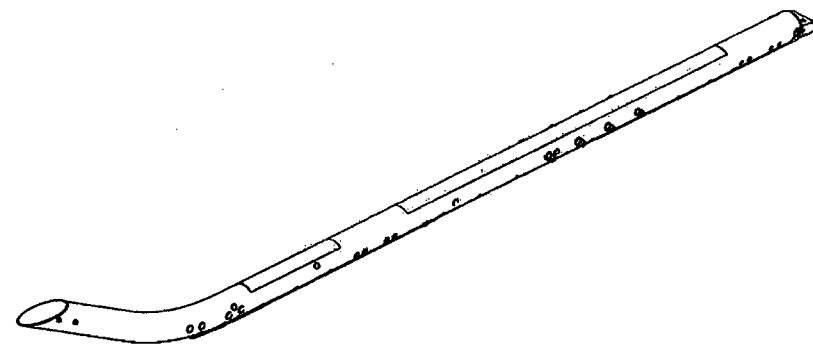
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A

A



D2750-041 350 SKIDTUBE ASSEMBLY, LH

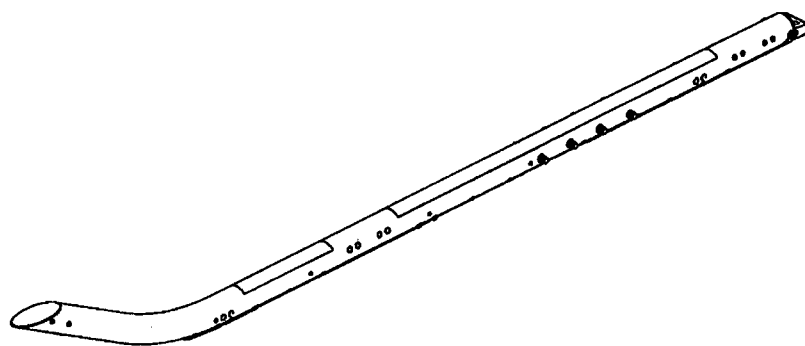


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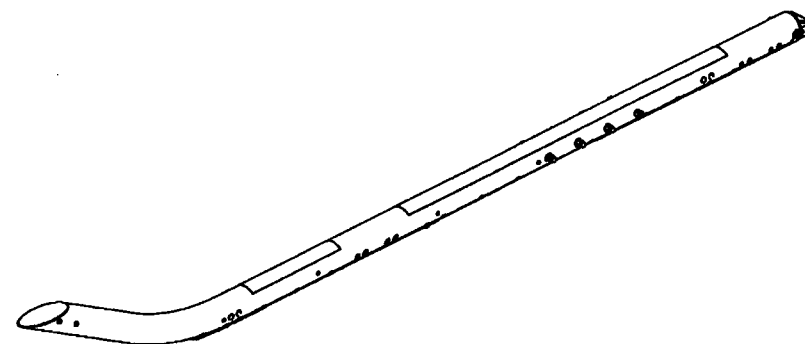
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DE APPR.		350 SKIDTUBE ASSEMBLY	NTS
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D2750-043 350 SKIDTUBE ASSEMBLY, LH

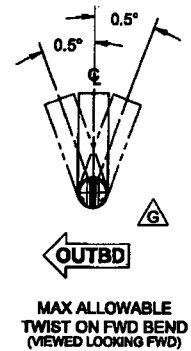
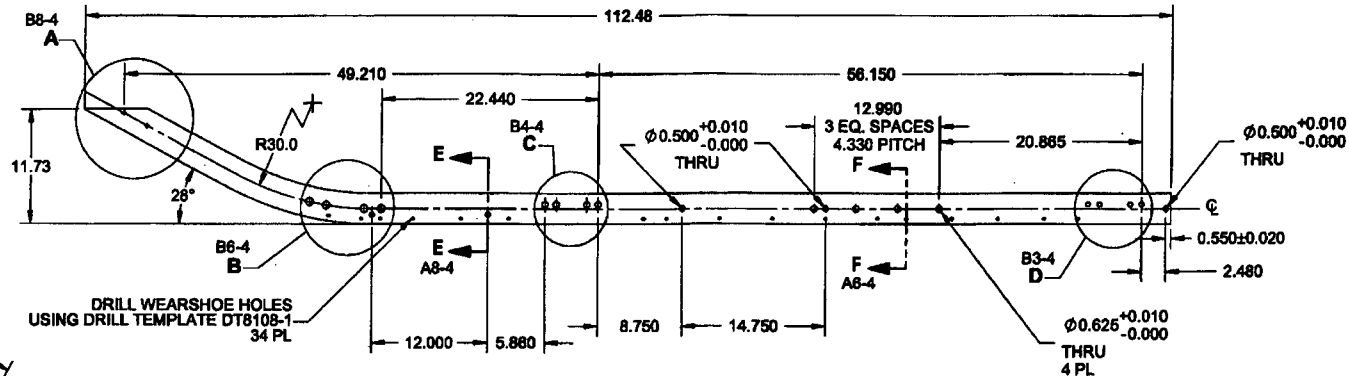


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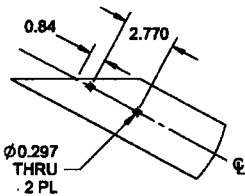
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MFG. APPR.	<i>[Signature]</i>	SHEET 3 OF 11	
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	350 SKIDTUBE ASSEMBLY	NTS
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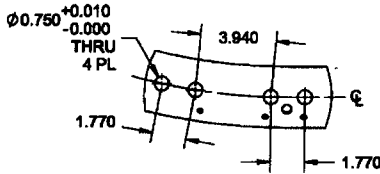
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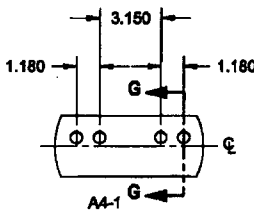
D2750-1 LH SKIDTUBE



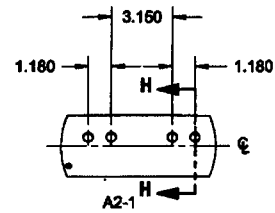
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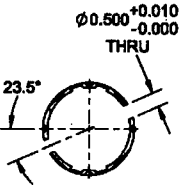
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SCALE 2X



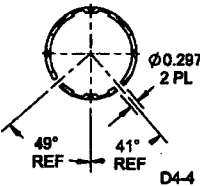
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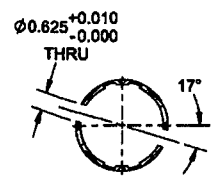
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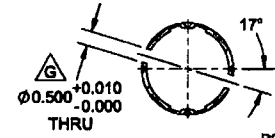
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SECTION F-F
SCALE 3X, 17 PL



SECTION G-G
SCALE 3X, 4 PL

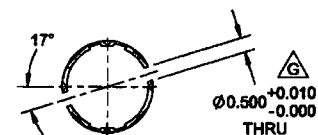
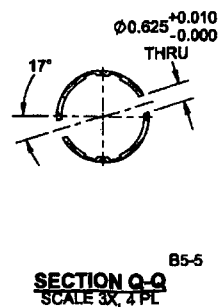
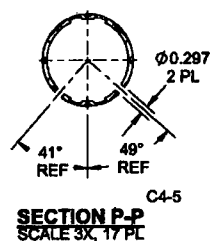
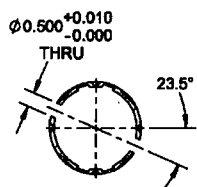
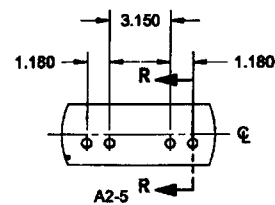
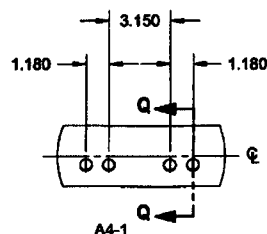
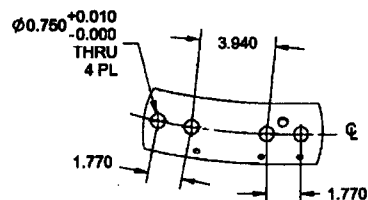
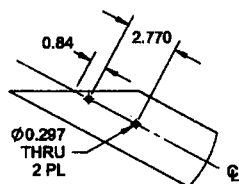
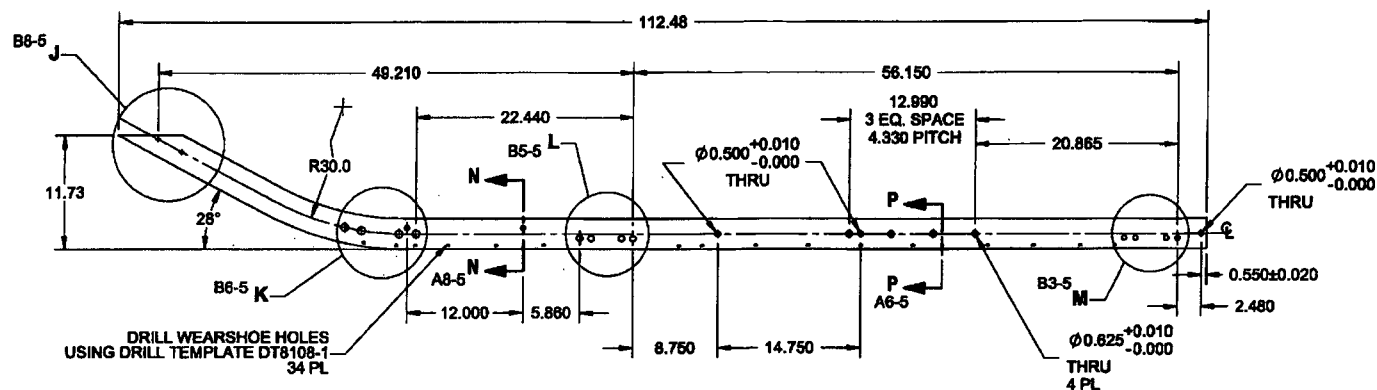


SECTION H-H
SCALE 3X, 4 PL

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2013-08-13

DESIGN	MM	DART AEROSPACE USA, INC.	
DRAWN		KENT, WA	
CHECKED		DRAWING NO.	REV. G
MFG. APPR.		D2750	SHEET 4 OF 11
APPROVED		TITLE	SCALE
DE APPR.		350 SKIDTUBE ASSEMBLY	NTS
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8 7 6 5 4 3 2 1

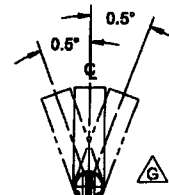
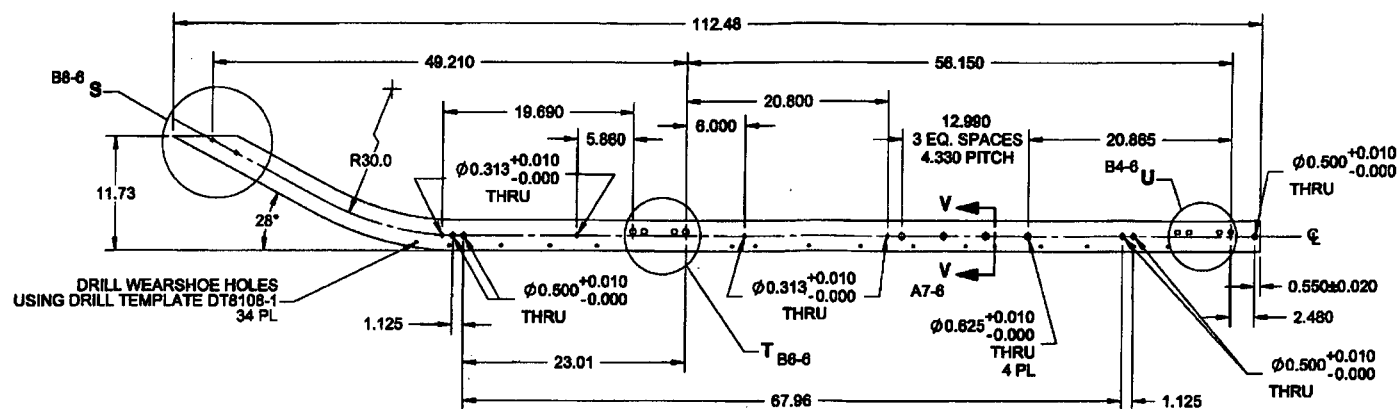


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APPROVED		SHEET 6 OF 11
DE APPR.		SCALE
DATE	13.07.11	350 SKIDTUBE ASSEMBLY
		NTS

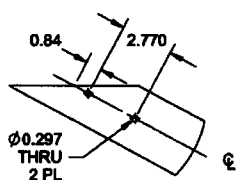
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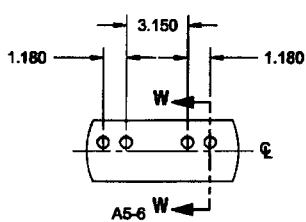


OUTBO
MAX ALLOWABLE
TWIST ON FWD BEND
(VIEWED LOOKING FWD)

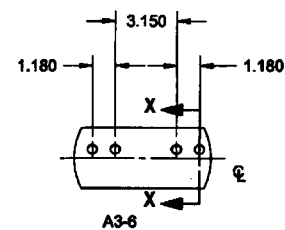
D2750-3 LH SKIDTUBE



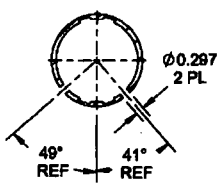
DETAIL S
D8-6
SCALE 2X



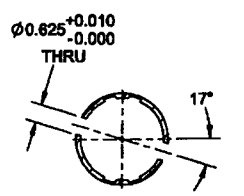
DETAIL T
C5-6
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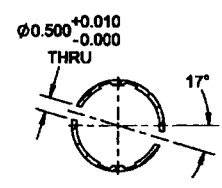
DETAIL U
D3-6
SCALE 2X



SECTION V-V
C4-6
SCALE 3X, 17 PL



SECTION W-W
B6-6
SCALE 3X, 4 PL

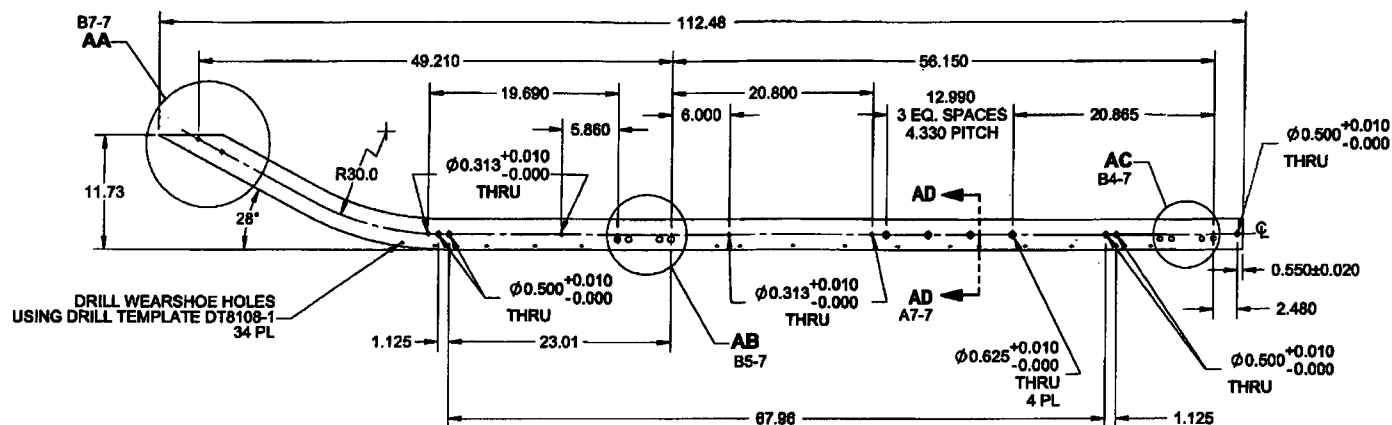


SECTION X-X
B4-6
SCALE 3X, 4 PL

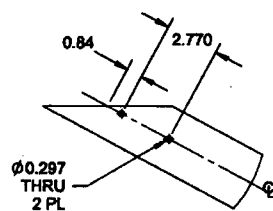
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CHECKED		DRAWING NO. D2750	REV. G
MFG. APPR.		SHEET 8 OF 11	
APPROVED		TITLE	SCALE
DE APPR.		350 SKIDTUBE ASSEMBLY	
DATE	13.07.11	NTS	

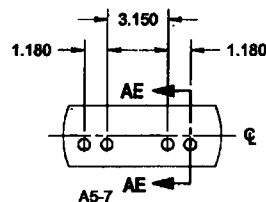
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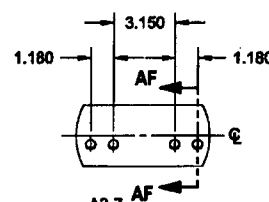
D2750-4 RH SKIDTUBE



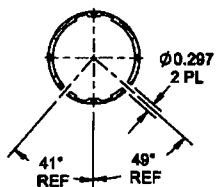
DETAIL AA
SCALE 2X



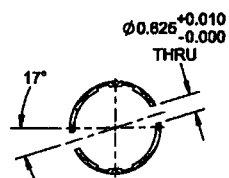
DETAIL AB
SCALE 2X



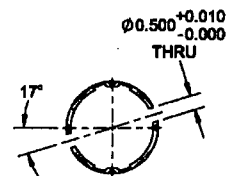
DETAIL AC
SCALE 2X



SECTION AD-AD
SCALE 3X, 17 PL



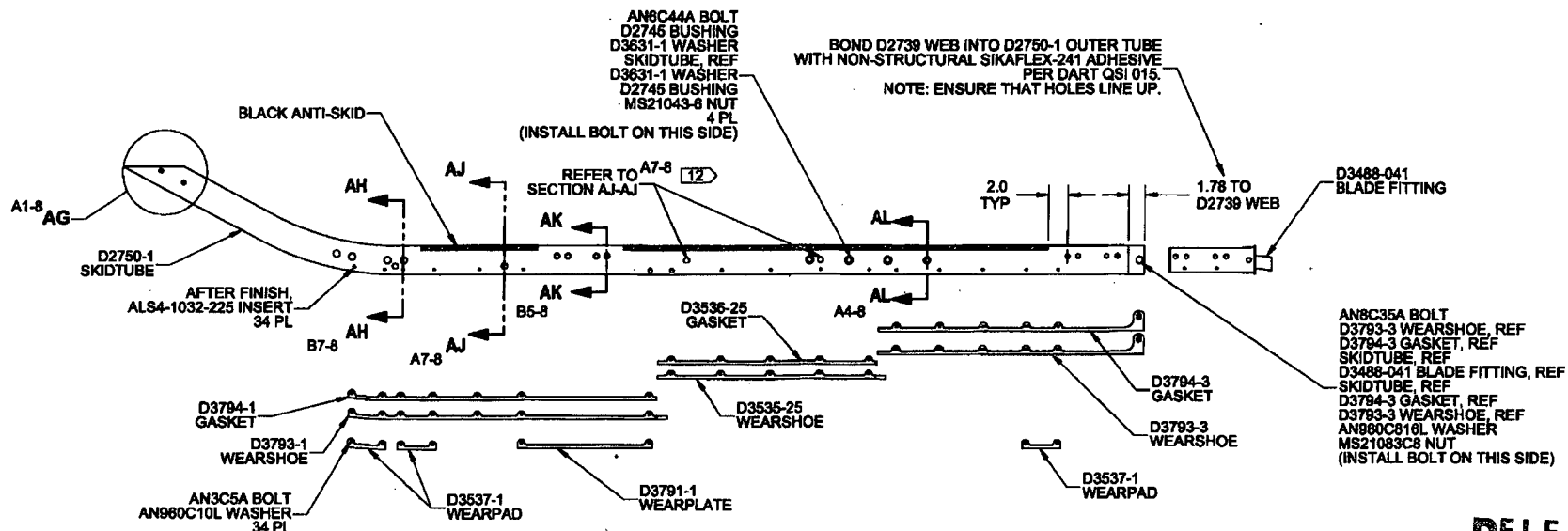
SECTION AE-AE
SCALE 3X, 4 PL



SECTION AF-AF
SCALE 3X, 4 PL

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D2750-041 350 SKIDTUBE ASSEMBLY, LH

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SECTION AH-AH
SCALE 3X, 4 PL

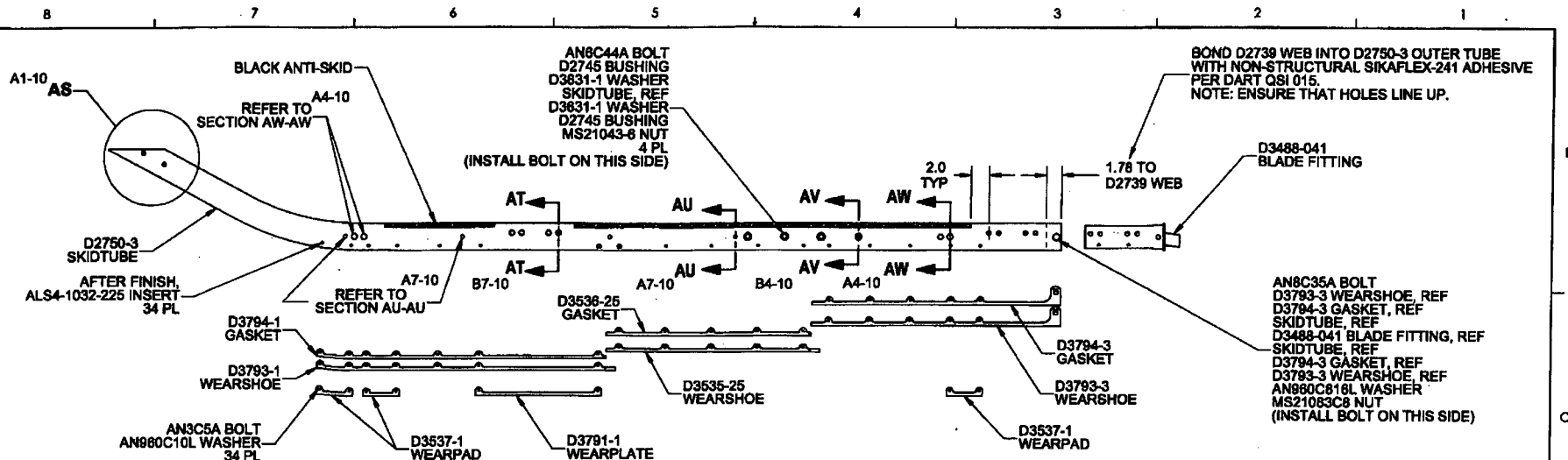
SECTION AK-AK
SCALE 3X, 4 PL

DETAIL AG
SCALE 2X

SECTION AL-AL
SCALE 3X, 4 PL

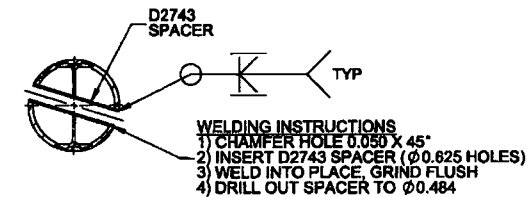
SECTION AL-AL
SCALE 3X, 4 PL
(HARDWARE REMOVED FOR CLARITY)

DESIGN	MM	DART AEROSPACE USA, INC.	
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CHECKED		DRAWING NO.	REV. G
MFG. APPR.		D2750	SHEET 8 OF 11
APPROVED		TITLE	SCALE
DE APPR.		350 SKIDTUBE ASSEMBLY	NTS
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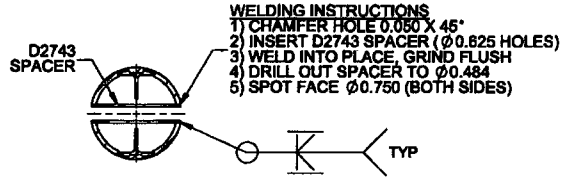


D2750-043 350 SKIDTUBE ASSEMBLY, LH

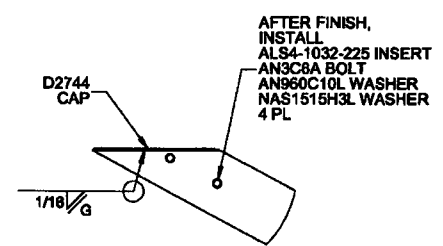
RELEASE
2013-08-13



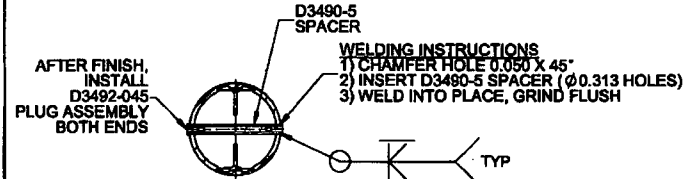
SECTION AT-AT SCALE 3X, 4 PL



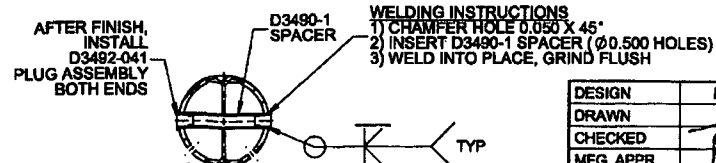
SECTION AV-AV SCALE 3X, 4 PL (HARDWARE REMOVED FOR CLARITY)



DETAIL AS SCALE 2X



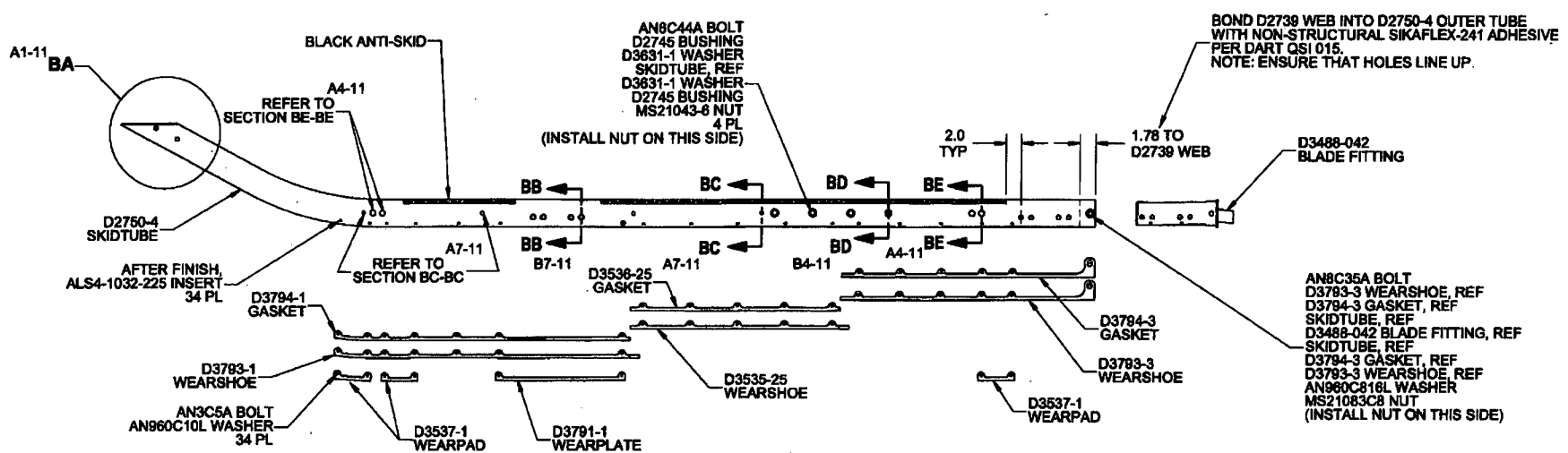
SECTION AU-AU SCALE 3X, 4 PL



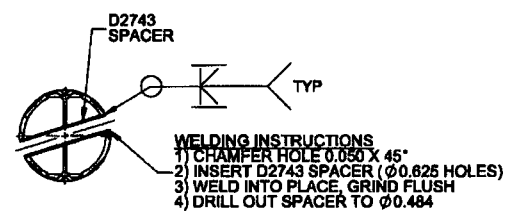
SECTION AW-AW SCALE 3X, 4 PL

DESIGN	MM	DART AEROSPACE USA, INC.	
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CHECKED		DRAWING NO.	REV. G
MFG. APPR.		D2750	SHEET 10 OF 11
APPROVED		TITLE	SCALE
DE APPR.		350 SKIDTUBE ASSEMBLY	NTS
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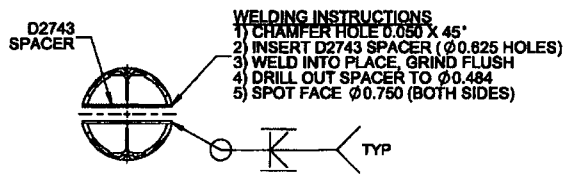
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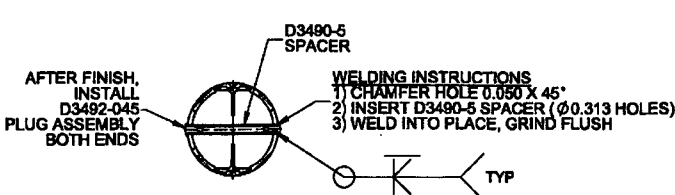
D2750-044 350 SKIDTUBE ASSEMBLY, RH



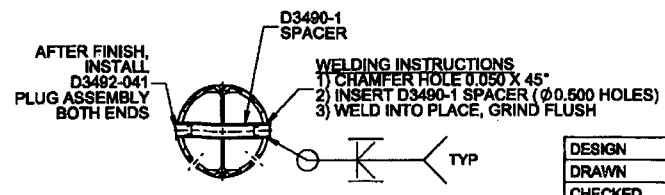
SECTION BB-BB
SCALE 3X, 4 PL



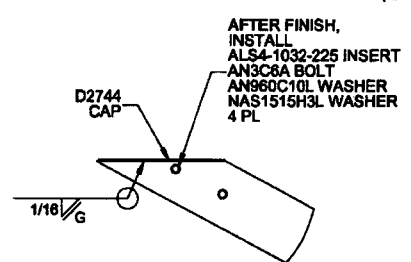
SECTION BD-BD
SCALE 3X, 4 PL
(HARDWARE REMOVED FOR CLARITY)



SECTION BC-BC
SCALE 3X, 4 PL



SECTION BE-BE
SCALE 3X, 4 PL



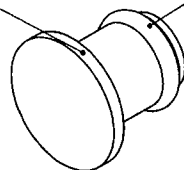
DETAIL BA
SCALE 2X

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2013-08-13

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CHECKED		DRAWING NO.	REV. G
MFG. APPR.		D2750	SHEET 11 OF 11
APPROVED		TITLE	SCALE
DE APPR.		350 SKIDTUBE ASSEMBLY	NTS
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D3492-XX PLUG
(SEE TABLE)

NAS1611 O-RING
(SEE TABLE)



D3492-XXX PLUG PARTS LIST

QTY -041	QTY -043	QTY -045	QTY -047	QTY -049	QTY -051	QTY -053	QTY -055	PART NUMBER	DESCRIPTION
X								D3492-041	PLUG ASSEMBLY
	X							D3492-043	PLUG ASSEMBLY
		X						D3492-045	PLUG ASSEMBLY
			X					D3492-047	PLUG ASSEMBLY
				X				D3492-049	PLUG ASSEMBLY
					X			D3492-051	PLUG ASSEMBLY
						X		D3492-053	PLUG ASSEMBLY
							X	D3492-055	PLUG ASSEMBLY
1								D3492-1	PLUG
	1							D3492-3	PLUG
		1						D3492-5	PLUG
			1					D3492-7	PLUG
				1				D3492-9	PLUG
					1			D3492-11	PLUG
						1		D3492-13	PLUG
							1	D3492-15	PLUG
		1						NAS1611-005	O-RING
			1					NAS1611-007	O-RING
1								NAS1611-010	O-RING
	1					1		NAS1611-012	O-RING
					1		1	NAS1611-013	O-RING
								NAS1611-015	O-RING
				1				NAS1611-016	O-RING

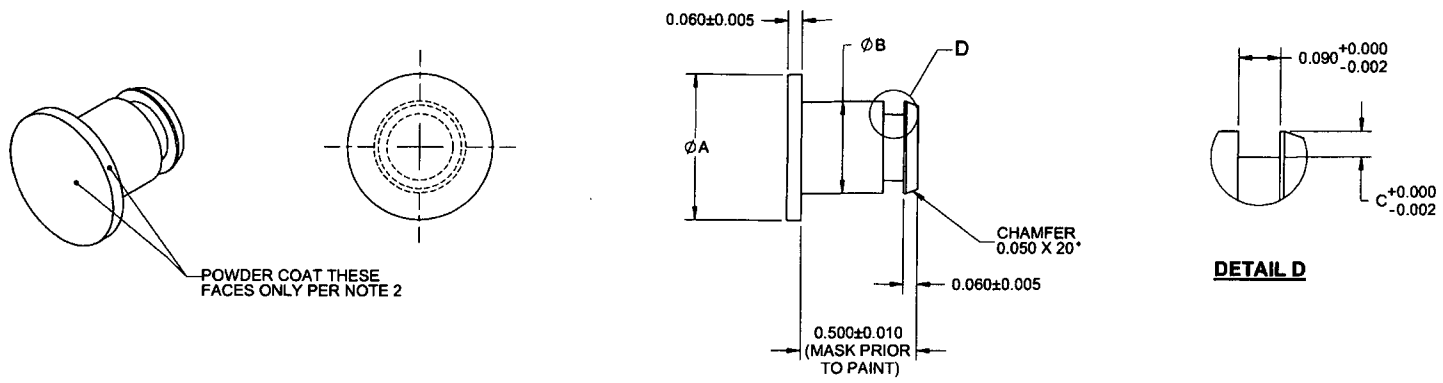
NOTES:

1) O-RING: POSSIBLE SUPPLIER P/N: NAS1611-XXX OR PARKER 2-XXX

RELEASED
2013-11-13

E	ADD -055 PLUG ASSY & -15 PLUG	AP	13.08.08
D	INCORPORATED DEO D3492-C-1. SHT 2 DIM C FOR -1 WAS 0.055. (SEE CAR11-048)	AJS	11.05.24
C	ADD -049/-051/-053, CHANGE DRAWING FORMAT	PH	07.10.05
B	ADD -047; UPDATE DIM A FOR -045	PH	06.05.11
A	NEW ISSUE	PH	06.01.04
REV.	DESCRIPTION	BY	DATE
DESIGN	PH	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AP		
CHECKED	AS	DRAWING NO.	REV. E
MFG. APPR.	AS	D3492	SHEET 1 OF 2
APPROVED	AS	TITLE	SCALE
DE APPR.	AS	PLUG	NTS
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8 7 6 5 4 3 2 1



D3492-XX PLUG

D3492-XX PLUG MACHINING DETAILS

P/N	A	B	C	MATERIAL SPEC
D3492-1	0.625	0.394	0.050	M6061T6R0.625
D3492-3	0.750	0.582	0.045	M6061T6R0.750
D3492-5	0.375	0.188	0.045	M6061T6R0.375
D3492-7	0.500	0.270	0.045	M6061T6R0.500
D3492-9	0.938	0.750	0.045	M6061T6R1.000
D3492-11	0.850	0.664	0.045	M6061T6R0.875
D3492-13	0.750	0.510	0.045	M6061T6R0.750
D3492-15	0.850	0.640	0.050	M6061T6R0.875

- NOTES:**
- 1) MATERIAL: ALUMINUM 5052-H32 OR 6061-T6 OR 1100-0 PER QQ-A-225/7 (5052) OR QQ-A-225/8 (6061) OR QQ-A-200/8 (6061) OR QQ-A-225/1 (1100) (REF. DART MATERIAL SPEC M6061T6R0.000)
 - 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT WHITE GLOSS (4.3.5.1) PER DART QSI 005 4.3
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: N/A
 - 7) WEIGHT: N/A

DESIGN	PH	DART AEROSPACE LTD	
DRAWN	AP	HAWKESBURY, ONTARIO, CANADA	
CHECKED	AS	DRAWING NO.	REV. E
MFG. APPR.	AS	D3492	SHEET 2 OF 2
APPROVED	AS	TITLE	SCALE
DE APPR.	AS	PLUG	4:1
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2013-11-13

8 7 6 5 4 3 2 1

Work Order ID 147417

Wednesday, June 08, 2016 3:16:17 PM

147417

Accept

N900040100

Setup Start *NS1*

Stop *NS2*

Item ID: D350-636-012

Revision ID: Skidtube RH, Std Wearplates, DART (Apical) Cylindrical/Aerazur Float Comp.

Item Name: Start Date: 5/27/2016 Start Qty: 1.00 *1*

Required Date: 6/8/2016 Req'd Qty: 1.00 *1*

Cust Item ID:

Customer:

Run Start *NR1*

Stop *NR2*

Reference:

Approvals: Process Plan: ML3 Date: JUN 10 2016

Tooling:

SPC (Y/N):

Date:

Date:

QC:

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Sequence ID/
Work Center ID

Operation
Description

Draw Nbr

Revision Nbr

D2750-042

G

D3492

E

DAS
6
8-60

AUG 02 2016

0.00

Document Control

DOCUMENT CONTROL

0.00

100

100

DC

Doc.Control -USB or Paperwork

Memo

record fwd angle: 89.7°

Photocopy blue file and type labels per PPP D350-636-012 CHG 007

DAS
21
9-69

AUG 02 2016

16-7-11 DL